

## Scientists change how we calculate dog years

6th July, 2020



For decades, dog lovers have been incorrectly calculating the age of their pet pooches. People have traditionally worked out their dog's age in "human years" by multiplying by seven. However, researchers at the University of California San Diego School of Medicine in

the USA have come up with a new formula. They say it more precisely determines canine age. Their new method requires a little more than simple mental arithmetic to work out a dog's age. It involves a comparison of the genomes of dogs and humans. Scientists had to analyse how DNA changes as humans and dogs age. The scientists regard such DNA analysis as the best way to measure the ageing speed of mammals.

The researchers analysed blood samples from 105 Labrador retrievers. After a bit of number crunching, they created a graph to show the different rates at which canines and humans age. They said a one-year-old dog is similar to a 30-year-old human, while a four-year-old hound is comparable to a 52-year-old person. Researcher Trey Ideker said by the time a dog reaches seven years old, its ageing slows. He said: "This makes sense. When you think about it, a nine-month-old dog can have puppies, so we already knew that the 1:7 ratio wasn't an accurate measure of age." The researchers said their new formula doesn't fully address the fact that different breeds of dog age at different speeds.

Sources: [thesun.co.uk](http://thesun.co.uk) / [metro.co.uk](http://metro.co.uk) / [cnn.com](http://cnn.com)

### Writing

Dogs are the best pets. Discuss.

### Chat

Talk about these words from the article.

decades / calculating / pet / age / formula / arithmetic / comparison / mammals / researchers / blood samples / human / ageing / puppies / measure / dog breeds

### True / False

- a) The article said we have miscalculated dogs' ages for centuries. T / F
- b) The way of finding a dog's age in human years is to divide by seven. T / F
- c) A new way of finding a dog's age involves comparisons of DNA. T / F
- d) Scientists say analysing DNA is the best way to age marsupials. T / F
- e) Researchers analysed blood samples of 105 different breeds of dog. T / F
- f) Researchers said a one-year-old dog has a human age of 30. T / F
- g) A researcher says the rate of dogs' ageing slows down from seven. T / F
- h) Different breeds of dogs age at different rates. T / F

### Synonym Match

(The words in **bold** are from the news article.)

- |                        |                |
|------------------------|----------------|
| 1. <b>lovers</b>       | a. recipe      |
| 2. <b>worked out</b>   | b. basic       |
| 3. <b>come up with</b> | c. specimens   |
| 4. <b>simple</b>       | d. calculated  |
| 5. <b>analyse</b>      | e. precise     |
| 6. <b>samples</b>      | f. equivalent  |
| 7. <b>graph</b>        | g. enthusiasts |
| 8. <b>comparable</b>   | h. examine     |
| 9. <b>accurate</b>     | i. chart       |
| 10. <b>formula</b>     | j. devised     |

### Discussion – Student A

- a) How happy are you with your age?
- b) What do you think of dogs?
- c) How good are dogs as pets?
- d) What is the best age to be?
- e) In what ways can dogs help humans?
- f) How good are you at simple arithmetic?
- g) How do you feel about getting older?
- h) How much of a dog lover are you?

## Phrase Match

- |  |                            |
|--|----------------------------|
| 1. dog   | a. arithmetic              |
| 2. worked out their dog's age in "human years" | b. of dog                  |
| 3. They say it more precisely                  | c. speed of mammals        |
| 4. simple mental                               | d. crunching               |
| 5. measure the ageing                          | e. ratio                   |
| 6. The researchers analysed blood              | f. by multiplying by seven |
| 7. After a bit of number                       | g. samples                 |
| 8. a four-year-old hound is comparable         | h. determines canine age   |
| 9. the 1:7                                     | i. to a 52-year-old person |
| 10. different breeds                           | j. lovers                  |

## Discussion – Student B

- What do you think about what you read?
- What breeds of dog do you like best?
- How much do you like number crunching?
- Why is it important to know how quickly dogs age?
- What were you doing when you were seven years old?
- Do humans age at different rate?
- What are the downsides of ageing?
- What questions would you like to ask the scientists?

## Spelling

- by myliplingut by seven
- it more lryespeic determines canine age
- simple mental ritemichat
- It involves a isanmpocro of the genomes
- DNA nilaysas
- measure the ageing speed of lmmmsaa
- The researchers analysed blood spsalem
- After a bit of number nncihugcr
- a four-year-old hondu
- merlapcoba to a 52-year-old person
- the 1:7 ratio wasn't an caucrtea measure
- different rebdse of dog age at different speeds

### Answers – Synonym Match

1. g	2. d	3. j	4. b	5. h
6. c	7. i	8. f	9. e	10. a

## Role Play

### Role A – Dogs

You think dogs are the best pets. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): goldfish, parrots or horses.

### Role B – Goldfish

You think goldfish are the best pets. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): dogs, parrots or horses.

### Role C – Parrots

You think parrots are the best pets. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): goldfish, dogs or horses.

### Role D – Horses

You think horses are the best pets. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): goldfish, parrots or dogs.

## Speaking – Pets

Rank these with your partner. Put the best pets at the top. Change partners often and share your rankings.

- |              |           |
|--------------|-----------|
| • dogs       | • rabbits |
| • hamsters   | • parrots |
| • goldfish   | • iguana  |
| • tarantulas | • horses  |

### Answers – True False

a	F	b	F	c	T	d	F	e	F	f	T	g	T	h	T
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Answers to Phrase Match and Spelling are in the text.